



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,594	04/05/2001	Dieter Kantz	GR 00 P 1679	4825

7590

05/22/2003

LERNER AND GREENBERG, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480

EXAMINER

KARLSEN, ERNEST F

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,594

Applicant(s)

KANTZ ET AL.

Examiner

Ernest F. Karlson

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 7-31 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 8-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 17.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2829

1. The Examiner called Mr. Greenberg on April 29, 2003 to ask if the statement on page 5 of the Amendment of April 1, 2003 which reads "Applicants respectfully traverse the election requirement on the ground that the species of Figs. 5A and 5B are not patentably distinct." was presented in error. Mr. Greenberg stated that it was presented in error. Prosecution will proceed as if the above statement was not present.

2. Applicant's election with traverse of species of Figure 5A in Paper No. 16 is acknowledged. The traversal is on the ground(s) that the two embodiments reflect the same basic underlying inventive concept. This is not found persuasive because Applicants have not shown that the identified species are not mutually exclusive.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 1 and 8-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 16.

4. Claims 7 and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The meaning of ^{"areally"}~~"really"~~ is not clear. An exact definition is requested. The structure and function of the apparatus of Figure 5A is not clear. Page 20, lines 15-25 of the specification relate to Figure 5A. It is stated that a plurality of chips are disposed on the support or the semiconductor wafer 10. Chips that are parts of a wafer could be placed on another wafer or on

Art Unit: 2829

some kind of insulator. It appears that such an arrangement is what applicants are describing but it is not clear. It is stated that the solar cell is disposed over the whole area of the surface of the semiconductor wafer 10. The description sounds like the solar cell is between the chips and the semiconductor wafer but Figure 5A shows the solar cell over the chips. Where the solar cell is located is not clear. No composition is given for the radiation-absorbing layer so one wishing to make and use the apparatus would be left to hunt for a suitable material.

5. Claims 7 and 20-31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A semiconductor wafer having IC elements formed on or in the wafer is like a piece of plastic with coins embedded in the plastic not like a piece of plastic with coins laying on top of the piece of plastic. Claim 20, lines 2-6 read like the analogy of coins on top of a piece of plastic and it is noted that Figure 5A corresponds to claim 20. It is not clear from where support for claim 20 is drawn. Exactly what is shown in Figure 5A is not clear. The word ^{"areally"} ~~"really"~~ does not appear in the specification specifically with respect to Figure 5A. The specification states that the solar cell is disposed over the whole area on the surface of the semiconductor wafer 10. The specification says "on the surface" of the semiconductor wafer. This is presumably under the chips. The use of the word ^{"areally"} ~~"really"~~ in claim 20 is considered to be without proper support.

Art Unit: 2829

6. Claims 7 and 20-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what all the claimed elements are and it is not clear how they are interrelated and interconnected to produce the desired results. "Said semiconductor chip" wherever it occurs lacks proper antecedent.

7. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 7, 21 and 22 recite the broad recitation, and the claim also recites no disclosure of composition of the radiation-absorbing layer is present which is the narrower statement of the range/limitation.

Art Unit: 2829

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

9. (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

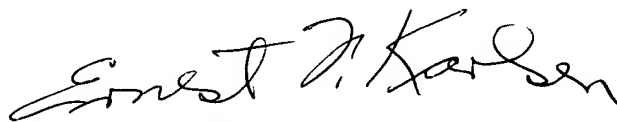
The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIA (pre-AIA 35 U.S.C. 102(e)).

10. Claims 7 and 20-31 are, insofar as understood, rejected under 35 U.S.C. 102(e) as being fully anticipated by Cook et al or Akram.

Note Figure 1 of Cook et al and Figure 4 of Akram. Cook et al at column 4, lines 57-63 indicate they position the solar cell in the kerf for supplying power to the chips. Because the use of the word "areally" is not clear from the disclosure no patentable weight is given to it.

Karlsen/ek

05/15/03


ERNEST KARLSEN
PRIMARY EXAMINER